HIGH EFFICIENCY SINGLE AND MULTIPLE WAVELENGTH STABILIZED LASER SYSTEMS

Abstract of the Invention

In a stabilized laser system, a signal is to be generated at an output thereof having a desired central wavelength. At least one laser, which, while emitting light and having a preselected portion thereof fed back thereto, causes the output signal of the at least one laser source to be shifted in wavelength in a first direction which is spaced apart from the center wavelength of the fed back signal. A feedback generating arrangement is coupled to the at least one laser to process a first portion of the output signal from the at least one laser and generate a feedback signal having a spectral response peaking at a wavelength shifted in an opposite direction to the first direction generated by at least one laser. The feedback signal that is shifted in the opposite direction causes the at least one laser to provide an output signal at the output of the stabilized laser system having a spectral response that peaks essentially at the desired wavelength.